

fast forward

AUDIO VISUAL DEPARTMENT CONCORDIA UNIVERSITY VOL.2 NO.1 JAN. 1988

CONCORDIA JOINS EDUCATIONAL TV NETWORK

Concordia University has joined the consortium of Quebec colleges and universities, operating the educational television channel CFTU, broadcasting on channel 29 in Montreal (cable 23) and via satellite and cable in most population

centres in the province. Concordia will be contributing three and a half hours of programming per week, starting January 11th., 1988.

Each programme will be followed by a message giving a telephone number which may be called for further information.

Programme schedule.

	M	T	W	T	F	S	S
Concordia Presents	16:00	23:30					07:00
Concordia Today CUTV		07:00		23:30		20:00	01:00
Starting a Business		07:30	12:00				12:30
The Day the Universe changed:		09:30	14:00				16:00
Science and Culture in the Western Tradition							

VIDEO DISK PROJECT WINS PRIZES

An interactive video disk project in which Concordia University's Audio-Visual Department collaborated has won two major prizes at the 1987 29th Annual Cindy Awards presentations of the Association of Visual Communicators in Los Angeles. "Interact: Meridian Business Services" won a Gold for "Best Level III

Interactive Video" and the "Best in Show Cindy." Concordia developed and produced the prototype for this programme in 1985 and won a prize at the 1986 Nebraska Video Disk Festival for the best industrial training video disk. The Audio Visual Department continued to collaborate with ON/Q Corporation in the production of "Interact" and designed and developed a microprocessor-controlled Telephone Central Office Emulator.

THE "LOOK" OF COMPUTER-ASSISTED LEARNING

By Roger Kenner

As microcomputers become ever more sophisticated, the once-prevalent image of computer-assisted instruction, that of page upon page of text scrolling across the computer screen, has been replaced with thoughts of computer-generated graphic images appearing in full colour and motion, to the accompaniment of computer-generated muzak (sic). Computer manufacturers are quick to tout the impressive graphic and sound generation capabilities of their newest lines, while the producers of authoring systems (software for creating teaching material) devote most of their energy to making full use of these new-found capabilities.

There is no doubt that simple graphic effects and occasional computer-generated ditties, if used moderately and with some pedagogical purpose, can greatly enhance otherwise sound teaching software. Computer-generated graphics and sound may not be the answer, however, where the subject being taught requires serious use of sophisticated images, music, sounds, and so forth.

We have all seen, probably on TV commercials, the marvellous results being produced at the cutting edge of research into computer-generated images. We must keep in mind, however, that this kind of work is not being done with the typical computer hardware available to students. Nor do we often consider the human and computer time required to prepare such images.

A digitized image of a famous painting, for example, cannot be reproduced on a typical computer

screen with anywhere near the speed or detail that is available from: a video signal sent through a high quality television monitor, a slide, or a textbook.

Before turning to computer-generated media, the person designing a computer-assisted learning package should seriously consider the applicability of "off-line" resources. In other words, have the computer ask the student to "look at the painting on page 50 of the book."

If such an approach is not acceptable, then consider the computer's enormous capability for controlling other pieces of equipment, equipment dedicated to producing the highest quality audio or visual results. There are, for example, computer-controlled audio-tape players, audio compact disks, slide-projectors, video-tape players, and videodisks, to name a few.

Indeed, the student need not even see the computer that is managing the instruction. A recent package produced by the Audio-Visual Department used a standard telephone for student interaction and relayed images from a computer-controlled videodisk. The "computer" was hardly in evidence.

SEMINAR ON COPYRIGHT

Last May the government tabled Bill C-60, a bill to amend the original Copyright Act of 1924. The Government of Canada's promotional literature indicates that this urgently needed reform will finally address the concerns of an information-based society that has witnessed the advent of radio, television, photocopiers, audio and video tape recorders, computers, satellites and a host of information storage and retrieval

devices. Copyright was originally defined as the exclusive right to control copying. The proposed new law attempts to balance copyright holder's rights with user's needs for the widest possible access to copyright material. However, it is important to note that the new amendment takes direct aim at piracy in the film, record and computer industries, recommending increased criminal penalties of up to \$1 million and jail sentences of up to five years. Consequently the need to clarify what copyright infringement is becomes essential. In response to this need, a copyright awareness symposium is being organized for early in the new year. A representative from Canada's Department of Communications will be available to help clarify the government's new copyright policy. Detailed information regarding the date and locale of this symposium will be published in an upcoming Thursday Report. For more information contact Erika Justmann, H-341, local 3443.

GOODIES AND GIZMOS

By Tony Techrat

Not another video format! 'Fraid so - coming soon to a video store near you - Super VHS. Capable of better-than-broadcast quality with 430 lines of resolution, the new format developed by JVC promises to be the best home video system yet. Standard VHS tapes may be played and recorded on the new machines, but a special tape is required for recording in the Super mode. The cost is expected to be in the \$1500 range. (Batteries extra).

A new data compression technique now permits one hour of moving video plus audio on a standard Compact Disc. GE/RCA demonstrated the new disc at a recent seminar and stressed its

importance for use in interactive systems. (The discs also make nifty flower pots).

HDTV. Hot Dogs Taste Velvety? Maybe, but High Definition TV, a proposed worldwide standard to replace all current systems in use is under development in Japan, North America and Europe. Japan's NHK has demonstrated a system using 1125 scan lines and a Panavision-style picture with a width/height ratio of 16:9. Picture quality is said to equal that of motion picture film, and the definition is such that Tom Selleck's dimples can be seen from 5 miles away.

GE has sold its consumer electronics division to Thomson SA of France, leaving Zenith and Curtis-Mathes as the only U.S. manufacturers in the field.

Tired of burned toast? Help is at hand. Microprocessor-controlled toasters have arrived on the market - guaranteed precise control over the color of your toast

every time. What next? Microprocessor-controlled can-openers?

HARD DISK EMULATOR

6.6 MB Verbatim floppy disk units have been installed in two of the portable MS-DOS PC's used in classrooms in conjunction with large screen data display equipment. The system allows the uploading of up to 5.5 MB of data onto a special high density floppy disk. The disk may then be removed and stored for use on other occasions. In this way, the complex procedure of formatting and uploading a hard disk for each presentation is avoided. The disk unit is available with a portable computer and may be borrowed for uploading at the user's site. Further details are available from Roger Kenner at 3430. High density floppy disks may be purchased at the equipment depots (H-421 or AD105) and the equipment may be reserved at H341 (3444) SGW or AD105(3465) Loyola.

LEARNING LABS RESERVED VIDEOS

By Luis Nasim

The Learning Labs are now equipped with 6 Beta cassette players for viewing video tapes. Each viewing station has been set up with headphones to accommodate up to 3 students, and remote controls for the equipment. An extra VCR for copying excerpts from tapes, and a video image printer which provides hard copies of still-frame pictures, will also be accessible starting in January.

A growing collection of tapes is available to students in Cinema, Communication Studies, Engineering, Physics, TESL, and Commerce. Facilities are available on a first-come first-served basis, but validated ID cards are required.

Professors wishing to leave tapes on reserve at the Labs are welcome to do so. For more information, drop in at the Labs (Room H-527) or call 848-3431.

WORLD TELEVISION STANDARDS

By Massimo Di Bitonto

Have you ever sent a video of your wedding reception to friends or relatives in Europe, only to learn of their disappointment in not being able to view your masterpiece? Before you dismiss it as technical incompetence, consider this: world video systems are not compatible.

Currently, there are three major systems for colour encoding and two for scanning, and each is incompatible with the others. If you try to play a tape from Europe on your machine in Canada, you will probably see only a series of horizontal bars and hear speeded up sound.

The three systems are: NTSC, PAL and SECAM



continued

NTSC (National Television Systems Committee) or (Never Twice the Same Colour)

This system was the first colour encoding system to be developed and is therefore the least advanced technically. It is in use primarily in Canada, the U.S., Japan, and parts of South and Central America.

Technical Tid Bits:

- Power requirements: 60 hz
- Recording rate: 30 frames per second
- Scanning rate: 525 lines/frame

PAL (Phase Alternate Line)

This system is more advanced than the NTSC system. Not only is the colour encoding system different, the power frequency and therefore the scanning rates are also, making it completely incompatible with NTSC. PAL is used primarily in European countries such as England, West Germany, Italy, and some Middle Eastern and African countries.

Technical Tid Bits:

- Power requirements: 50 hz
- Recording rate: 25 frames per second
- Scanning rate: 625 lines/frame

SECAM (Sequential with Memory)

This system was developed by France and is similar to PAL, however it is incompatible with it, as well as with NTSC. This system is used in France, the USSR, and most communist block countries.

Technical Tid Bits:

- Power requirements: 50 hz
- Recording rate: 25 frames per second
- Scanning rate: 625 lines/frame

By now you may think that all is lost, but there's no need to feel that way. There is a solution! There are specialized video centers equipped to transfer from one system to another, right here in Montreal.

The Audio Visual Department has all the information you may need regarding these centers, so don't hesitate to call 848-3444 for advice.

PHOTOGRAPHY

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research projects, presentations,
social events
Consultation
Other Photographic Services*

HALL BUILDING - ROOM 340

TEL: 848-3458

MITE AVISTA Leading Concordia University Into 21st Century

Multimedia is the latest buzzword in the computer industry, and Concordia University has staked its claim on this new technological landscape.

Leading the way is MITE (pronounced mighty) AVISTA, a state-of-the-art Amiga-based Multimedia Interactive Technology Environment. At the core of this exciting new lab are 10 Amiga 2000HD computers, a just-released Amiga 3000 (with a whopping 10 megs of ram and a 100 meg hard drive), and a nine monitor video wall.

Add to this two Korg MIDI keyboards (Wavestation and Rhythm synth), a prototype Korg drum machine, peripherals like a Scanner, audio and visual digitizers, framegrabber, genlock, videodisc player, an 8mm video camera, various formats of VCRs, compact disc player, and four-track porta-studio.

And let's not forget the exhaustive list of software packages, too numerous to list here, and selection of printers (HP colour Paint Jet, QMS Postscript laser printer, and HP DeskJet). MITE AVISTA also has a Canon colour laser photocopier.

All of these add up to one thing -- a fully visually interactive teaching and learning environment. Combined



Helen Bambic-Workman, MITE AVISTA Head, demystifies multimedia technology for the Concordia community.

with AVISTA's other facilities, including an audio room, video editing suites, and copy stand, MITE AVISTA is one of the most advanced media labs of its kind in Quebec.

The best part is it's free of charge for all students and faculty. MITE AVISTA offers workshops throughout the school term, from beginner levels for novices, to more advanced applications for old pros.

The key phrase to keep in mind at MITE AVISTA is DON'T PANIC, which is displayed in large friendly letters on the walls and on the user interface. We want to demystify new technology and show that multimedia skills are within the grasp of anyone eager to learn them.

The latest in home video Goodies and Gizmos for Videophiles

Well-heeled videophiles are creating the newest trend in video - the home theatre. Tired of waiting for HDTV, they're hooking up expensive equipment such as large-screen high-resolution TVs, laser disc players, Super VHS VCRs and audio/video receivers with surround sound, along with comfortable furnishings, bar, remote-controlled lighting and any other imaginable feature. Couch potatoes everywhere are sprouting new eyes to take it all in.

Early in 1991, Europeans will be able to buy wide-screen TV sets marketed by Thomson. These will have a screen size in the ratio 16:9 and receive programs in HD-MAC, the European version of HDTV, which is also capable of transmitting eight separate channels of digital audio at the same time, permitting multi-lingual broadcasts.

Manufacturers strutted their stuff at the Japan Electronics Show held in Osaka last year. Panasonic demonstrated a domestic version of the Lucasfilm THX surround sound system as well as their "Universal" VCR, capable of recording and playback in NTSC, PAL, or SECAM (there must be other formats in the universe). JVC in conjunction with Seiko showed the latest formats in LCD projectors with 210,000 pixels and 350-line resolution.

Closer to home, Faroudja Laboratories of California are marketing SuperNTSC equipment. This system gives an improved picture

and is fully compatible with existing TV standards, requiring only special encoding equipment at the transmission source and decoding circuitry in the receiver. The system has been used for closed-circuit, cable and on-air broadcasts in the U.S. and Japan with positive results. SuperNTSC could bridge the gap until the problems of fully digital HDTV transmissions are solved.

A new type of TV display is under development by Foresight Inc. of Arizona. The material used to coat the face of the tube behaves like an optical semiconductor, and can stay in a particular state until changed by a new signal. Thus, only changes in picture information need be presented to the tube. With the aid of microprocessor enhancement, a resolution of more than 4,000,000 pixels is foreseen using this new technology.

In the Wars of the Camcorders, Sony's 8mm format has surpassed VHS in sales; Zenith, RCA and Hitachi all jumped on the bandwagon and

announced 8mm models this year.

Three new birds will appear in the heavens in 1993 when Sky Cable launches its direct broadcast satellites. A broadcasting power of 200 watts will make reception possible using "squarials" - flat panel antennas about 12" square placed outside a window (or hung from the clothesline) -- and a special receiver connected to the TV. Not all of the proposed 108 channels will be free -- some will be used for pay-per-view services such as movies and sports events.

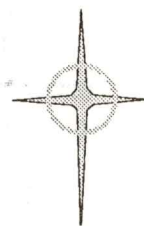
TONY'S TIPS: To check any infrared remote control, turn on your transistor radio, select the AM band and tune between stations. Hold the remote close to the radio and press and hold any button. A "chirping" sound indicates that the control is working OK.

And remember...if it ain't broke, don't even think about fixing it!

• **Tony Techrat**



The Audio Visual
Department Wishes
the Concordia
Community a
Happy and Peaceful
New Year



Nouvelles du département audio-visuel de Loyola

Depuis plus de 25 ans, l'audio-visuel de Loyola offre une vaste gamme de services à la communauté universitaire. Aujourd'hui, nous aimerons en souligner quelques-uns et vous communiquer certains changements qui vous intéresseront sûrement.

Premièrement, le service audio-visuel de Loyola est heureux d'annoncer qu'il s'est porté acqureur d'un ordinateur AMIGA et une imprimante laser PostScript de QMS. Ceux-ci seront disponibles pour l'utilisation dès janvier et répondra aux divers besoins graphiques, vidéographiques et autres, de la communauté universitaire.

De plus, nous venons d'accroître notre collection

d'effets sonores sur disques compacts en achetant les séries 2000, 3000, 4000 et Lucasfilm de la compagnie Sound Ideas. Vous pourrez les utiliser le jour dans la salle AVISTA et les soirs de semaine du lundi au jeudi inclusivement de 22:00 à 9:00 dans le studio de son.

Le studio de son est un studio professionnel équipé d'une table de mixage huit pistes; d'un enregistreur sur bande magnétique huit pistes; de deux appareils deux pistes; et d'autres appareils enregistreurs et à effets sonores. Le studio de son est un centre d'auto production. Si vous n'avez pas les connaissances de base qui sont requises pour son utilisation, vous pourrez les acquérir en vision-

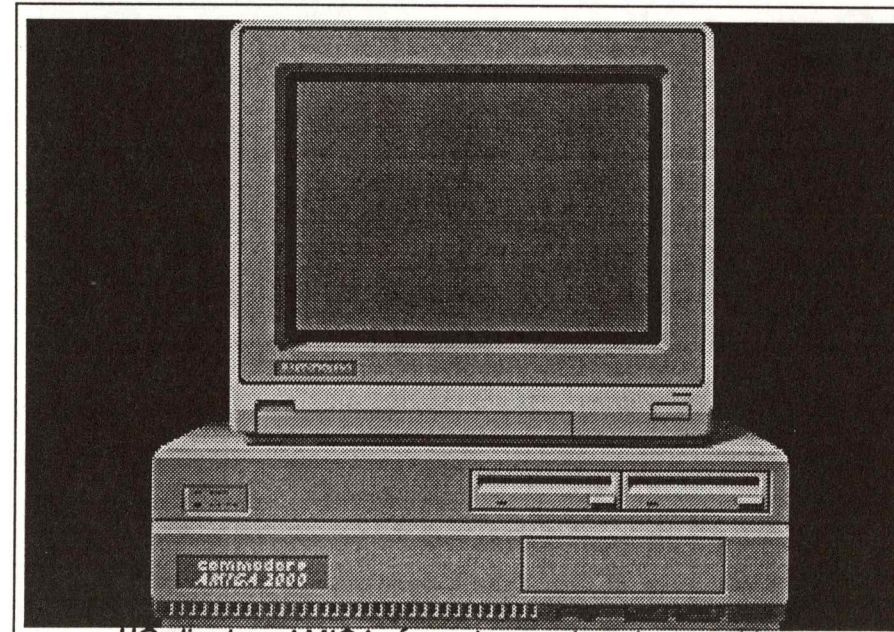
nant deux bande vidéo de séminaire d'orientation qui a été offert aux utilisateurs plus tôt cette année.

Une autre particularité du service audio-visuel de Loyola est sa chambre noire graphique qui permet de reproduire et/ou d'agrandir ou réduire tous les travaux d'arts graphiques, les graphiques et les cartes géographiques en produisant des copies propres prêtes pour l'impression.

Si la photographie vous intéresse, nous avons deux chambres noires photographiques. Une pour le traitement de vos films et l'autre pour l'impression. Si vous préférez la photographie couleurs, nous traitons avec un laboratoire photographique. Le livreur vient cueillir les films vers onze heures tous les jours de la semaine et nous retourne la plupart des travaux photographiques en 24 heures.

Pour plus amples informations, n'hésitez pas à venir nous rencontrer au local AD-105 du pavillon administration ou encore à nous téléphoner au 848-3465. Nous nous ferons un plaisir de vous aider au meilleur de nos capacités.

• **Marie-Josée Morel**



L'Ordinateur AMIGA répondra aux besoins graphiques, vidéographiques et autres de la communauté universitaire.

VIDEO FORMATS: DEMYSTIFIED

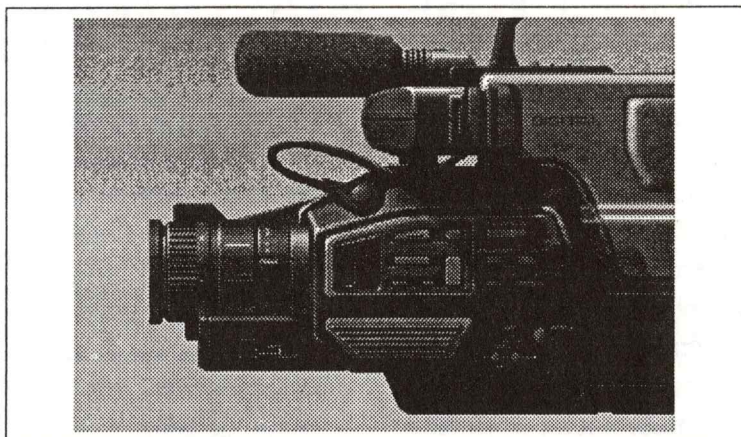
3/4" U-Matic • The original industrial/educational cassette format, now widely used in broadcast news, has one single speed. Because of its reliability it remains the preferred standard for educational use.

VHS 1/2" cassette • Introduced for home use with three speeds, SP (standard play), LP (long play) and EP or SLP (extended play). Camera systems run on the SP speed. Concordia AV has no VHS cameras.

BETA 1/2" cassette • Also introduced on the market for home use with three speeds, BI, BII, and BIII. Concordia AV adopted BI cameras in 1981 to replace 1/2" open reel and we still have a BI editing facility.

V-8mm cassette • The most recent format to be introduced in the home market. Its higher quality and compactness have made it an attractive alternative to VHS and BETA. Concordia has adopted this new standard to replace the BETA I facilities. A high quality industrial version known as Hi8 is also now available and is currently being tested as a production medium for CANAL, the educational television channel.

International Standards • There are currently eight different television standards in use



in the world, these fall under three main categories: **PAL**, **SECAM**, and **NTSC**. In general, North America, Western South America, Burma, Japan and the Philippines use **NTSC**. France, USSR and former dependants use **SECAM**. Europe minus France and former dependants and Eastern South America use **PAL**.

The AV Department has a VHS multi-standard playback system that will handle all world standards and information on standards conversion for copies is available from **VMR (848-3444)**.

• **Carole Thériault and Mark Schofield**

Concordia to launch new dish

Weather permitting, the Hall building will be sporting yet another roof-top decoration by the end of January.

Joining the forest of antennas will be a steerable satellite receiving dish that will permit Concordia to avail itself of the ever growing repertory of educational and professional development programmes and video conferences offered via satellite.

The recently launched Canadian Satellite Leasing Services under the auspices of Magic Lantern and Telestat Canada, will be offering more than 50 Video conferences, 40 television courses and 150 resource programmes next year starting in January.

Although most of the material will initially originate south of the border, the company will actively encourage Canadian educational institutions to contribute material.

Concordia has acted as a site for three video conferences since 1986, each time with rental equipment. Judging by the number of enquiries received by the Audio-Visual Department from within the University, it seems time that Concordia invested in its own dish.

• **M.S.**